

6.0 APPENDIX B: HAZARD AND VULNERABILITY DATA

The information in this appendix supplements the discussion of Champaign County’s hazards and vulnerabilities from Section 2: Hazard Identification and Risk Assessment. A complete list of historical incidents of each hazard is provided here. Additionally, detailed data on the anticipated damage to Champaign County from a 100-year flood and earthquake, per HAZUS estimates, is provided.

5.1 HAZARD HISTORY DATA

The National Climactic Data Center has maintained records on weather incidents across the United States since 1950. The tables below provide a history of the incidents on record for Champaign County from 1950 through present day.

5.1.1 Drought and Extreme Heat

These incidents include all occurrences categorized as drought or extreme heat.

| Hazard | Location | Date | Injuries | Deaths | Property Damage | Crop Damage |
|---------|------------------|------------|----------|--------|-----------------|-------------|
| Drought | Champaign (Zone) | 07/01/1999 | 0 | 0 | 0 | 0 |
| Drought | Champaign (Zone) | 08/01/1999 | 0 | 0 | 0 | 0 |

5.1.2 Flood

The flood incidents identified in this table include events classified as flood and flash flood that occurred in Champaign County since 1950.

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------|------------------|------------|--------|----------|-----------------|-------------|
| Flash Flood | Champaign County | 04/29/1996 | 0 | 0 | 2K | 0 |
| Flash Flood | Champaign County | 05/11/1996 | 0 | 0 | 5K | 0 |
| Flash Flood | Champaign County | 06/01/1997 | 0 | 0 | 75K | 0 |
| Flash Flood | St. Paris | 01/21/1999 | 0 | 0 | 0 | 0 |
| Flash Flood | St. Paris | 04/28/1999 | 0 | 0 | 0 | 0 |
| Flash Flood | Champaign County | 09/23/2000 | 0 | 0 | 10K | 0 |
| Flash Flood | Rosewood | 04/19/2002 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 06/05/2002 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 09/27/2002 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 11/10/2002 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 07/07/2003 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 08/02/2003 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------|------------------|------------|--------|----------|-----------------|-------------|
| Flood | Champaign County | 01/04/2004 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 01/04/2004 | 0 | 0 | 0 | 0 |
| Flood | Champaign County | 01/05/2005 | 0 | 0 | 20K | 0 |
| Flood | Champaign County | 01/11/2005 | 0 | 0 | 10K | 0 |
| Flood | Mechanicsburg | 06/02/2006 | 0 | 0 | 0 | 0 |
| Flood | Urbana | 03/02/2007 | 0 | 0 | 3K | 0 |
| Flood | Urbana | 03/14/2007 | 0 | 0 | 2K | 0 |
| Flood | Bowlusville | 03/19/2008 | 0 | 0 | 3K | 0 |
| Flash Flood | Westville | 07/12/2008 | 1 | 0 | 15K | 0 |
| Flood | Westville | 07/13/2008 | 0 | 0 | 1K | 0 |
| Flood | Urbana | 05/11/2011 | 0 | 0 | 10K | 0 |
| Flood | Christiansburg | 12/05/2011 | 0 | 0 | 1K | 0 |
| Flood | St. Paris | 01/27/2012 | 0 | 0 | 1K | 0 |
| Flood | North Lewisburg | 03/18/2012 | 0 | 0 | 0 | 0 |
| Flash Flood | Westville | 03/18/2012 | 0 | 0 | 1K | 0 |
| Flood | St. Paris | 07/08/2013 | 0 | 0 | 0 | 0 |
| Flood | Grandview Hgts | 04/29/2017 | 0 | 0 | 0 | 0 |
| Flood | Catawba | 08/11/2017 | 0 | 0 | 0 | 0 |
| Flood | Bowlusville | 02/24/2018 | 0 | 0 | 3K | 0 |
| Flood | Cable | 06/08/2018 | 0 | 0 | 0 | 0 |

5.1.3 Severe Thunderstorm

Thunderstorm incidents include events that produced any combination of hail, lightning and thunderstorm wind; all hazards were not necessarily present in all incidents.

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------|------------------|-----------|--------|----------|-----------------|-------------|
| Thunderstorm Wind | Champaign County | 6/13/1958 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 6/13/1958 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 6/22/1960 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 6/25/1971 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 5/17/1974 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 5/17/1974 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 1/11/1975 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/3/1975 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 3/26/1976 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 4/8/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 4/8/1980 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------|-----------------------|------------|--------|----------|-----------------|-------------|
| Thunderstorm Wind | Champaign County | 6/1/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/5/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/5/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/5/1980 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 7/12/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/12/1980 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 7/12/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 8/11/1980 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 6/21/1981 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 3/31/1982 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 3/31/1982 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 5/22/1982 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 5/27/1982 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 5/27/1982 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 3/27/1983 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 4/30/1983 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 5/2/1983 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 6/13/1984 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 9/13/1984 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 4/5/1985 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/14/1985 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 3/10/1986 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 5/15/1986 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 6/22/1986 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 8/5/1989 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 11/15/1989 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 6/8/1990 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 9/14/1990 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 7/2/1991 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/2/1991 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Champaign County | 7/14/1992 | 0 | 0 | 0 | 0 |
| Hail | Champaign County | 7/16/1992 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 4/27/1994 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | St. Paris and | 6/20/1994 | 0 | 0 | 50K | 0 |
| Hail | New Madison | 7/29/1994 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 5/24/1995 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Countywide | 6/7/1995 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | St. Paris & 4 S Urban | 6/22/1995 | 0 | 0 | 5K | 0 |
| Hail | St. Paris & 4 S Urban | 6/22/1995 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 6/26/1995 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------|-----------------|------------|--------|----------|-----------------|-------------|
| Thunderstorm Wind | Countywide | 7/13/1995 | 0 | 0 | 7K | 0 |
| Thunderstorm Wind | Carysville and | 7/15/1995 | 0 | 0 | 10K | 0 |
| Hail | Carysville and | 7/15/1995 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | St. Paris | 7/16/1995 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Urbana | 4/29/1996 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Christiansburg | 7/7/1996 | 0 | 0 | 50K | 0 |
| Thunderstorm Wind | Countywide | 10/30/1996 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Urbana | 1/5/1997 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Mechanicsburg | 5/18/1997 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Urbana | 7/2/1997 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | Urbana | 7/27/1997 | 0 | 0 | 5K | 0 |
| Hail | Mechanicsburg | 5/13/1998 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Countywide | 6/19/1998 | 0 | 0 | 10K | 0 |
| Hail | Mechanicsburg | 6/28/1998 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Mechanicsburg | 7/19/1998 | 0 | 0 | 10K | 0 |
| Hail | Urbana | 8/25/1998 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Urbana | 11/10/1998 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | Urbana | 2/12/1999 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Countywide | 5/6/1999 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 6/11/1999 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Urbana | 6/11/1999 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Urbana | 7/6/1999 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | St Paris | 7/9/1999 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | North Lewisburg | 7/21/1999 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Countywide | 4/20/2000 | 0 | 0 | 75K | 0 |
| Thunderstorm Wind | St Paris | 5/10/2000 | 0 | 0 | 5K | 0 |
| Hail | Urbana | 5/18/2000 | 0 | 0 | 25K | 0 |
| Hail | Spring Hills | 7/28/2000 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 7/28/2000 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | St Paris | 8/9/2000 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Terre Haute | 9/20/2000 | 0 | 0 | 10K | 0 |
| Hail | St Paris | 4/9/2001 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Mechanicsburg | 4/9/2001 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Urbana | 10/24/2001 | 0 | 0 | 7K | 0 |
| Lightning | Urbana | 5/12/2002 | 0 | 3 | | 0 |
| Thunderstorm Wind | Mechanicsburg | 5/12/2002 | 0 | 0 | 50K | 0 |
| Thunderstorm Wind | Countywide | 6/5/2002 | 0 | 0 | 0 | 0 |
| Hail | North Lewisburg | 6/27/2002 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | St Paris | 7/29/2002 | 0 | 0 | 3K | 0 |
| Hail | Mechanicsburg | 11/10/2002 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------|-----------------|------------|--------|----------|-----------------|-------------|
| Thunderstorm Wind | Urbana | 11/10/2002 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Countywide | 7/4/2003 | 0 | 0 | 7K | 0 |
| Thunderstorm Wind | Urbana | 7/5/2003 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Christiansburg | 7/6/2003 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 7/7/2003 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Countywide | 7/8/2003 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Urbana | 7/8/2003 | 0 | 0 | 20K | 0 |
| Thunderstorm Wind | Christiansburg | 7/21/2003 | 0 | 0 | 2K | 0 |
| Hail | St Paris | 5/17/2004 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 5/18/2004 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | St Paris | 5/21/2004 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | St Paris | 5/24/2004 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Mingo | 5/13/2005 | 0 | 0 | 0 | 0 |
| Hail | Urbana | 6/6/2005 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Mechanicsburg | 7/25/2005 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 8/20/2005 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 8/20/2005 | 0 | 0 | 5K | 0 |
| Hail | Urbana | 5/17/2006 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 5/25/2006 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | St Paris | 6/7/2006 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Countywide | 6/22/2006 | 0 | 0 | 7K | 0 |
| Thunderstorm Wind | North Lewisburg | 7/14/2006 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Countywide | 8/3/2006 | 0 | 1 | 8K | 0 |
| Hail | Urbana | 9/30/2006 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Urbana | 5/15/2007 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 6/17/2007 | 0 | 0 | 8K | 0 |
| Thunderstorm Wind | Urbana | 8/16/2007 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Kennard | 12/23/2007 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 6/13/2008 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | Urbana | 6/15/2008 | 0 | 0 | 3K | 0 |
| Hail | North Lewisburg | 6/22/2008 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Urbana | 6/25/2008 | 0 | 0 | 10K | 0 |
| Hail | Urbana | 6/25/2008 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Mechanicsburg | 6/25/2008 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 7/12/2008 | 0 | 0 | 6K | 0 |
| Thunderstorm Wind | Westville | 2/11/2009 | 0 | 0 | 8K | 0 |
| Thunderstorm Wind | Urbana | 5/3/2010 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Catawba Station | 6/15/2010 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Christiansburg | 9/7/2010 | 0 | 0 | 5K | 0 |
| Hail | North Lewisburg | 3/23/2011 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------|-----------------|------------|--------|----------|-----------------|-------------|
| Thunderstorm Wind | Crayon | 4/27/2011 | 0 | 0 | 1K | 0 |
| Hail | Mutual | 5/11/2011 | 0 | 0 | 0 | 0 |
| Hail | Urbana | 5/11/2011 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Mechanicsburg | 5/23/2011 | 0 | 0 | 1K | 0 |
| Hail | Urbana | 5/25/2011 | 0 | 0 | 0 | 0 |
| Hail | Urbana | 5/26/2011 | 0 | 0 | 0 | 0 |
| Hail | Urbana | 6/10/2011 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Northville | 8/7/2011 | 0 | 0 | 70K | 0 |
| Thunderstorm Wind | Mechanicsburg | 8/9/2011 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Urbana | 9/3/2011 | 0 | 0 | 6K | 0 |
| Hail | Spring Hills | 3/18/2012 | 0 | 0 | 0 | 0 |
| Hail | Spring Hills | 3/18/2012 | 0 | 0 | 0 | 0 |
| Hail | North Lewisburg | 3/18/2012 | 0 | 0 | 0 | 0 |
| Hail | North Lewisburg | 3/18/2012 | 0 | 0 | 0 | 0 |
| Hail | Mingo | 3/30/2012 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Urbana | 3/30/2012 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | St Paris | 6/29/2012 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Millerstown | 6/29/2012 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | North Lewisburg | 6/29/2012 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | North Lewisburg | 6/29/2012 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | North Lewisburg | 6/29/2012 | 0 | 0 | 25K | 0 |
| Thunderstorm Wind | Westville | 9/21/2012 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Urbana | 9/21/2012 | 0 | 0 | 20K | 0 |
| Thunderstorm Wind | Kings Creek | 7/10/2013 | 0 | 0 | 10K | 0 |
| Thunderstorm Wind | Urbana | 7/10/2013 | 0 | 0 | 7K | 0 |
| Thunderstorm Wind | Urbana | 7/10/2013 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Woodstock | 7/10/2013 | 0 | 0 | 2K | 0 |
| Thunderstorm Wind | Christiansburg | 7/20/2013 | 0 | 0 | 1K | 0 |
| Hail | St Paris | 8/21/2013 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Carysville | 10/31/2013 | 0 | 0 | 30K | 0 |
| Thunderstorm Wind | St Paris | 11/17/2013 | 0 | 0 | 1K | 0 |
| Hail | Thackery | 5/13/2014 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Kings Creek | 5/13/2014 | 0 | 0 | 3K | 0 |
| Hail | North Lewisburg | 5/13/2014 | 0 | 0 | 0 | 0 |
| Hail | Rosewood | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Westville | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Westville | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Millerstown | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Westville | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Westville | 5/21/2014 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------|--------------------|------------|--------|----------|-----------------|-------------|
| Hail | Urbana | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Urbana | 5/21/2014 | 0 | 0 | 0 | 0 |
| Hail | Westville | 5/21/2014 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Kennard | 6/24/2014 | 0 | 0 | 3K | 0 |
| Hail | Spring Hills | 7/26/2014 | 0 | 0 | 0 | 0 |
| Hail | Lippincotts | 7/26/2014 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Christiansburg | 5/11/2015 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Westville | 5/11/2015 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Mutual | 6/8/2015 | 0 | 0 | 5K | 0 |
| Hail | Bowlusville | 7/14/2015 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Northville | 12/23/2015 | 0 | 0 | 8K | 0 |
| Thunderstorm Wind | Thackery | 3/27/2016 | 0 | 0 | 4K | 0 |
| Thunderstorm Wind | Christiansburg | 7/13/2016 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Thackery | 7/13/2016 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Mechanicsburg | 7/13/2016 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Mechanicsburg | 8/27/2016 | 0 | 0 | 1K | 0 |
| Thunderstorm Wind | Urbana | 8/27/2016 | 0 | 0 | 0 | 0 |
| Hail | Grandview Hgts | 7/16/2017 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | St Paris | 7/21/2017 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Bowlusville | 7/21/2017 | 0 | 0 | 5K | 0 |
| Thunderstorm Wind | Urbana | 7/21/2017 | 0 | 0 | 3K | 0 |
| Thunderstorm Wind | Christiansburg | 5/15/2018 | 0 | 0 | 3K | 0 |
| Hail | Urbana Weller Arpt | 5/15/2018 | 0 | 0 | 0 | 0 |
| Thunderstorm Wind | Millerstown | 7/1/2018 | 0 | 0 | 3K | 0 |

5.1.4 Tornado

Confirmed tornadoes in Champaign County since 1950 are listed below.

| Hazard | Location | Date | Fujita Scale | Deaths | Injuries | Property Damage | Crop Damage |
|---------|------------------|------------|--------------|--------|----------|-----------------|-------------|
| Tornado | Champaign County | 06/13/1958 | F2 | 0 | 0 | 250K | 0 |
| Tornado | Champaign County | 11/16/1965 | F2 | 0 | 4 | 25K | 0 |
| Tornado | Champaign County | 05/10/1973 | F3 | 0 | 0 | 2.5K | 0 |
| Tornado | Champaign County | 04/09/1999 | F1 | 0 | 0 | 300K | 0 |
| Tornado | Champaign County | 07/27/2014 | EF0 | 0 | 0 | 15K | 0 |

5.1.5 Windstorm

Incidents identified as windstorms are limited to wind-only events. Events in which severe wind occurred along with another hazards, such as winter weather or severe thunderstorms, are identified under the primary hazard.

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-----------|------------------|------------|--------|----------|-----------------|-------------|
| High Wind | Champaign (Zone) | 04/06/1997 | 0 | 0 | 0 | 0 |
| High Wind | Champaign (Zone) | 12/11/2000 | 0 | 0 | 0 | 0 |
| High Wind | Champaign (Zone) | 03/09/2002 | 0 | 0 | 35K | 0 |
| High Wind | Champaign (Zone) | 05/11/2003 | 0 | 0 | 0 | 0 |
| High Wind | Champaign (Zone) | 12/01/2006 | 0 | 0 | 10K | 0 |
| High Wind | Champaign (Zone) | 09/14/2008 | 0 | 0 | 4.7M | 0 |
| High Wind | Champaign (Zone) | 02/11/2009 | 0 | 0 | 0 | 0 |
| High Wind | Champaign (Zone) | 12/09/2009 | 0 | 0 | 2K | 0 |
| High Wind | Champaign (Zone) | 04/03/2016 | 0 | 0 | 0 | 0 |

5.1.6 Winter Storm

Winter storm events include incidents classified as blizzard, extreme cold/wind chill, ice storm, or winter storm that occurred in Champaign County since 1950.

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|--------------|------------------|------------|--------|----------|-----------------|-------------|
| Winter Storm | Champaign (Zone) | 01/02/1999 | 0 | 0 | 25K | 0 |
| Winter Storm | Champaign (Zone) | 01/06/1996 | 0 | 0 | 500K | 0 |
| Ice Storm | Champaign (Zone) | 03/06/1996 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 03/19/1996 | 0 | 0 | 0 | 0 |
| Ice Storm | Champaign (Zone) | 01/24/1997 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 01/01/1999 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 01/07/1999 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 01/13/1999 | 0 | 0 | 0 | 0 |
| Ice Storm | Champaign (Zone) | 12/13/2000 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 03/26/2002 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 12/25/2002 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 02/15/2003 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 01/25/2004 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 03/16/2004 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 12/22/2004 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 01/21/2005 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 12/08/2005 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 12/15/2005 | 0 | 0 | 0 | 0 |

| Hazard | Location | Date | Deaths | Injuries | Property Damage | Crop Damage |
|-------------------------|------------------|------------|--------|----------|-----------------|-------------|
| Winter Storm | Champaign (Zone) | 03/07/2008 | 0 | 0 | 0 | 0 |
| Ice Storm | Champaign (Zone) | 12/23/2008 | 0 | 0 | 0 | 0 |
| Ice Storm | Champaign (Zone) | 01/10/2009 | 0 | 0 | 0 | 0 |
| Ice Storm | Champaign (Zone) | 02/01/2011 | 0 | 0 | 0 | 0 |
| Blizzard | Champaign (Zone) | 12/26/2012 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 03/05/2013 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 02/04/2014 | 0 | 0 | 0 | 0 |
| Ice Storm | Champaign (Zone) | 11/14/2018 | 0 | 0 | 0 | 0 |
| Winter Storm | Champaign (Zone) | 01/19/2019 | 0 | 0 | 0 | 0 |
| Extreme Cold/Wind Chill | Champaign (Zone) | 01/30/2019 | 0 | 0 | 0 | 0 |

5.2 HAZUS LOSS ESTIMATES

HAZUS is a nationally accepted methodology that utilizes U.S. Census and local geographic information systems (GIS) data to estimate losses for earthquakes, hurricanes, and floods. Because floods and earthquakes are identified as risks for Champaign County, HAZUS was used to generate and evaluate the county's vulnerability to these incidents. Estimates from HAZUS were generated using 2010 U.S. Census Bureau data, which calculated Champaign County's population as 40,097.

5.2.1 Flood

Champaign County's vulnerability to flood was evaluated utilizing a HAZUS scenario for a 100-year flood event. For a flood of this magnitude, the damage to the county would be significant. The incident would expose a significant portion of the county's buildings to damage. Table 5-1 identifies buildings by occupancy type for all of Champaign County and those exposed to risk in this scenario.

Table 5-1: Building Exposure by Occupancy

| Occupancy | Champaign County | | 100-Year Flood Scenario | |
|--------------|--------------------|------------------|-------------------------|------------------|
| | Exposure (\$1000) | Percent of Total | Exposure (\$1000) | Percent of Total |
| Residential | \$3,349,677 | 76.4% | \$796,846 | 80.2% |
| Commercial | \$531,965 | 12.1% | \$83,603 | 8.4% |
| Industrial | \$230,179 | 5.2% | \$59,150 | 6.0% |
| Agricultural | \$70,058 | 1.6% | \$32,073 | 3.2% |
| Religion | \$99,856 | 2.3% | \$13,747 | 1.4% |
| Government | \$22,444 | 0.5% | \$4,775 | 0.5% |
| Education | \$82,620 | 1.9% | \$3,712 | 0.4% |
| Total | \$4,386,799 | 100% | \$993,906 | 100% |

Essential Facility Inventory

Essential facilities are healthcare facilities like hospitals and clinics, fire and EMS stations, police stations, and operations and dispatch centers. Schools are included in essential facilities. Champaign County's essential facilities are identified in Table 5-2.

Table 5-2: Essential Facility Inventory

| Facility Type | Number |
|----------------------------|-------------|
| Hospital | 1 (20 beds) |
| Schools | 21 |
| Fire Stations | 5 |
| Police Stations | 5 |
| Emergency Operation Center | 1 |

Estimated Building Damage

Per HAZUS estimates, 31 buildings will sustain at least moderate damage. This accounts for 73% of the total buildings identified for the scenario. Zero buildings are estimated to be completely destroyed. Tables 5-3 and 5-4 identify the anticipated building damage based on occupancy type and building type.

Table 5-3: Expected Building Damage by Occupancy

| Occupancy | Percent Damaged | | | | | |
|--------------|-----------------|-----------|----------|----------|----------|----------|
| | 1-10% | 11-20% | 21-30% | 31-40% | 41- 50 % | > 50% |
| Agriculture | 0 | 0 | 0 | 0 | 0 | 0 |
| Commercial | 0 | 0 | 0 | 0 | 0 | 0 |
| Education | 0 | 0 | 0 | 0 | 0 | 0 |
| Government | 0 | 0 | 0 | 0 | 0 | 0 |
| Industrial | 0 | 0 | 0 | 0 | 0 | 0 |
| Religious | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential | 73 | 30 | 1 | 0 | 0 | 0 |
| Total | 73 | 30 | 1 | 0 | 0 | 0 |

Table 5-4: Expected Building Damage by Building Type

| Building Type | Percent Damaged | | | | | |
|----------------------|-----------------|-----------|----------|----------|----------|----------|
| | 1-10% | 11-20% | 21-30% | 31-40% | 41- 50 % | > 50% |
| Concrete | 0 | 0 | 0 | 0 | 0 | 0 |
| Manufactured Housing | 0 | 0 | 0 | 0 | 0 | 0 |
| Masonry | 8 | 2 | 0 | 0 | 0 | 0 |
| Steel | 0 | 0 | 0 | 0 | 0 | 0 |
| Wood | 65 | 28 | 1 | 0 | 0 | 0 |
| Total | 81 | 30 | 1 | 0 | 0 | 0 |

Based on this scenario, HAZUS does not predict that any critical facilities will sustain moderate or significant damage. Therefore, it is anticipated that the hospital beds, emergency services, and institutional services normally present in the county would continue to be functional in a 100-year flood scenario.

Table 5-5: Expected Damage to Essential Facilities

| Classification | Total | Moderate Damage | Substantial Damage | Loss of Use |
|-----------------|-------|-----------------|--------------------|-------------|
| Fire Stations | 5 | 0 | 0 | 0 |
| Hospitals | 1 | 0 | 0 | 0 |
| Police Stations | 5 | 0 | 0 | 0 |
| Schools | 21 | 0 | 0 | 0 |

Shelter Requirements

When flooding forces people from their homes, some will seek refuge at a public shelter. In this incident, it is anticipated that 542 households would be displaced and approximately 713 people would seek temporary shelter.

Building Related Losses

The total economic loss for the identified 100-year flood event is estimated to be \$22.63M.

Building-related losses are separated into two loss categories: direct building loss and business interruption loss. Building losses include structural damage and damage to contents. Business interruption losses include the costs associated with not being able to conduct normal business, displaced workers, and lost opportunities. Table 5-6 provides a summary of the anticipated losses.

Table 5-6: Building-Related Economic Loss Estimates

| Area | Residential | Commercial | Industrial | Others | Total |
|-------------------------------------|--------------|-------------|-------------|-------------|--------------|
| <i>Building Loss</i> | | | | | |
| Building | 8.40 | 0.83 | 0.97 | 0.42 | 10.62 |
| Content | 3.69 | 2.76 | 2.19 | 2.77 | 11.41 |
| Inventory | 0 | 0.10 | 0.32 | 0.14 | 0.55 |
| <i>Business Interruption</i> | | | | | |
| Income | 0 | 0.01 | 0 | 0 | 0.01 |
| Relocation | 0.01 | 0 | 0 | 0 | 0.01 |
| Rental Income | 0 | 0 | 0 | 0 | 0 |
| Wage | 0 | 0.01 | 0 | 0.01 | 0.02 |
| Total | 12.10 | 3.71 | 3.48 | 3.35 | 22.63 |

5.2.2 Earthquake

The simulated earthquake epicenter was assumed to be in Urbana, the county's most populated jurisdiction. The simulated earthquake had a magnitude of 5.0 on the Richter Scale and a depth of 5.0 km. The HAZUS loss estimation program utilized 2010 U.S. Census data for this scenario. There are an estimated 16,000 buildings in the county with a replacement value of \$4,386M.

Critical Facility Inventory

HAZUS separates critical facilities into essential facilities and high potential loss (HPL) facilities. Essential facilities are healthcare facilities like hospitals and clinics, fire and EMS stations, police stations, and operations centers. Schools are included in essential facilities. HPL facilities include dams, levees, nuclear power plants, military installations and hazardous material sites.

Table 5-7: Critical Facility Inventory

| Essential Facilities | | High Potential Loss Facilities | |
|----------------------|------------|--------------------------------|--------|
| Facility Type | Number | Facility Type | Number |
| Hospital | 1 (20beds) | Hazardous Materials Sites | 28 |
| Schools | 21 | | |
| Fire Stations | 5 | | |
| Police Stations | 5 | | |
| EOC | 1 | | |

Transportation and Utility Lifeline Inventory

Lifeline systems are defined as transportation and utilities. Transportation systems include highways, railways, and airports. Utility systems include water treatment and potable water plants, wastewater treatment plants, natural gas suppliers, fuel oil suppliers, electrical power plants, and communications hubs. The total value of these lifeline systems exceeds \$1,232M and includes more than 110 km of highway, 185 bridges, and 3,270 km of pipes.

Table 5-8: Transportation System Inventory

| System | Components | Quantity | Replacement Value |
|--------------|------------|----------|-------------------|
| Highways | Bridges | 185 | \$47.90M |
| | Segments | 18 | \$463.80M |
| Railways | Bridges | 1 | \$0.10M |
| | Facilities | 2 | \$5.30M |
| | Segments | 13 | \$62.50M |
| Bus | Facilities | 1 | \$1.10M |
| Airport | Facilities | 2 | \$21.30M |
| | Runways | 2 | \$75.90M |
| Total | | | \$678.00M |

Table 5-9: Utility System Inventory

| System | Components | Quantity | Replacement Value |
|---------------|--------------------|----------|-------------------|
| Potable Water | Distribution Lines | N/A | \$32.70M |
| Waste Water | Distribution Lines | N/A | \$19.60M |
| | Facilities | 7 | \$489.50M |
| Natural Gas | Distribution Lines | N/A | \$13.10M |
| Communication | Facilities | 1 | \$0.10M |
| Total | | | \$555.00M |

Building Damage

The estimated building damage according to HAZUS is extensive. The number of buildings projected to sustain moderate damage is 2,316, approximately 14% of all buildings in the county. It is estimated that 226 buildings would be destroyed. Table 5-10 summarizes the anticipated building damages.

Table 5-10: Expected Building Damage by Occupancy

| Occupancy | None | Slight | Moderate | Extensive | Complete |
|---------------------------|--------------|---------------|-----------------|------------------|-----------------|
| Agriculture | 107 | 48 | 61 | 34 | 9 |
| Commercial | 370 | 185 | 215 | 108 | 33 |
| Education | 12 | 5 | 6 | 3 | 1 |
| Government | 21 | 8 | 9 | 4 | 1 |
| Industrial | 135 | 63 | 79 | 43 | 13 |
| Other Residential | 784 | 402 | 416 | 190 | 45 |
| Religion | 57 | 23 | 21 | 10 | 3 |
| Single Family Residential | 8,017 | 3,050 | 1,509 | 416 | 122 |
| Total | 9,503 | 3,786 | 2,316 | 808 | 226 |

Depending on the type of building construction, damage from an earthquake can be more or less serious. Based on common types of construction, the scenario is extrapolated into damage according to type of construction type.

Table 5-11: Expected Building Damage by Building Type

| Building Type | None | Slight | Moderate | Extensive | Complete |
|----------------------|--------------|---------------|-----------------|------------------|-----------------|
| Wood | 7,198 | 2,588 | 955 | 120 | 9 |
| Steel | 187 | 77 | 136 | 93 | 28 |
| Concrete | 63 | 26 | 33 | 18 | 4 |
| Precast | 60 | 21 | 36 | 26 | 5 |
| Reinforced Masonry | 24 | 7 | 12 | 8 | 1 |
| Unreinforced Masonry | 1,596 | 844 | 825 | 383 | 142 |
| Manufactured Housing | 377 | 223 | 318 | 189 | 36 |
| Total | 9,503 | 3,786 | 2,316 | 808 | 226 |

Essential Facility Damage

According to HAZUS estimates, only 3 of the county's hospital beds (16%) would be available and functional on the day of the earthquake. These would be needed by patients already hospitalized at the time of the earthquake and by those requiring hospitalization for injuries sustained in the incident. After one week, it is estimated that 28% of the beds would be available. By the 30-day mark, an estimated 59% would be fully functional. Anticipated damage to other essential facilities is detailed in Table 5-12.

Table 5-12: Expected Damage to Essential Facilities

| Classification | Total | Moderate Damage >50% | Complete Damage > 50% | With Functionality >50% on Day 1 |
|-----------------|-------|----------------------|-----------------------|----------------------------------|
| Hospitals | 1 | 1 | 0 | 0 |
| Schools | 21 | 10 | 0 | 10 |
| EOCs | 1 | 1 | 0 | 0 |
| Police Stations | 5 | 1 | 0 | 4 |
| Fire Stations | 5 | 0 | 0 | 5 |

Transportation and Utility Lifeline Damage

Per HAZUS estimates, most highways, bridges, railways, and rail bridges will have more than 50% functionality on the first day after an earthquake and will continue to experience greater than 50% function throughout the recovery period. Limited damage to these transportation systems is expected.

Airports are also expected to have at least 50% functionality immediately following the incident. It is anticipated that two airports will sustain at least moderate damage. This damage is not expected to prevent them from functioning.

Tables 5-13 and 5-14 describe the anticipated damage to utility system facilities and pipelines.

Table 5-13: Expected Utility System Facility Damage

| System | Total | Moderate Damage | Complete Damage | Day 1 >50% Functionality | Day 7 >50% Functionality |
|---------------|-------|-----------------|-----------------|--------------------------|--------------------------|
| Waste Water | 7 | 5 | 0 | 1 | 7 |
| Communication | 1 | 1 | 0 | 1 | 1 |

Table 5-14: Expected Utility System Pipeline Damage

| Utility | Total Pipeline | Anticipated Leaks | Anticipated Line Breaks |
|---------------|----------------|-------------------|-------------------------|
| Potable Water | 1,635 | 146 | 37 |
| Waste Water | 981 | 105 | 26 |
| Natural Gas | 654 | 30 | 8 |

Electrical service is more difficult to restore. Table 5-15 outlines the number of customers anticipated to be without electric service following the incident. There are 15,329 households in the county.

Table 5-15: Expected Electric Power System Performance

| Days Post-Event | Households Without Service |
|-----------------|----------------------------|
| Day 1 | 7,655 |
| Day 3 | 4,793 |
| Day 7 | 1,835 |
| Day 30 | 303 |
| Day 90 | 9 |

Debris Generation

The amount of debris generated by an earthquake can be substantial. HAZUS classifies debris into two types based on the handling equipment required: brick/wood and reinforced concrete/steel. In the given scenario, a total of 130,000 tons of debris is anticipated. Brick/wood would comprise 49% of that amount. When converting these totals to truckloads, debris removal would require 5,240 truckloads, assuming 25 tons per truck.

Shelter Needs

Temporary public shelters are often necessary post-quake to provide housing for people displaced by the event. HAZUS estimates that 271 households would be displaced and 164 people would seek housing in a temporary shelter.

Casualties

The number of people estimated to be injured or killed by the earthquake is divided into four categories based on the extent of the victim's injuries:

- Level 1 – Require medical attention but not hospitalization
- Level 2 – Require hospitalization for non-life-threatening injuries
- Level 3 – Require hospitalization for critical injuries
- Level 4 – Fatalities

Casualty estimates are provided for 3 times of day that represent periods of the day that various sectors of the community operate at peak capacity loads. These figures are provided in Table 5-16.

Table 5-16: Casualty Estimates

| Time | Location | Level 1 | Level 2 | Level 3 | Level 4 |
|-------------|---------------------------|----------------|----------------|----------------|----------------|
| 2 AM | Commercial | 1 | 0 | 0 | 0 |
| | Commuting | 0 | 0 | 0 | 0 |
| | Educational | 0 | 0 | 0 | 0 |
| | Hotels | 0 | 0 | 0 | 0 |
| | Industrial | 4 | 1 | 0 | 0 |
| | Other Residential | 25 | 5 | 1 | 1 |
| | Single Family Residential | 70 | 16 | 2 | 4 |
| | TOTAL | 99 | 22 | 3 | 6 |
| 2 PM | Commercial | 68 | 16 | 2 | 4 |
| | Commuting | 0 | 0 | 0 | 0 |
| | Educational | 31 | 8 | 1 | 2 |
| | Hotels | 0 | 0 | 0 | 0 |
| | Industrial | 26 | 6 | 1 | 2 |
| | Other Residential | 6 | 1 | 0 | 0 |
| | Single Family | 16 | 4 | 1 | 1 |
| | TOTAL | 147 | 35 | 5 | 9 |
| 5 PM | Commercial | 51 | 12 | 2 | 3 |
| | Commuting | 0 | 1 | 1 | 0 |
| | Educational | 2 | 1 | 0 | 0 |
| | Hotels | 0 | 0 | 0 | 0 |
| | Industrial | 16 | 4 | 0 | 1 |
| | Other Residential | 10 | 2 | 0 | 0 |
| | Single Family Residential | 28 | 6 | 1 | 2 |
| | TOTAL | 107 | 26 | 4 | 7 |

Economic Loss

Total economic loss for this earthquake scenario is estimated to be \$580.98M. This includes building and lifeline related losses and is based on the building inventory in the county. Building losses are examined in two categories: direct building loss and business interruption loss. Direct building losses include structural damage and damage to contents. Business interruption losses include the costs associated with not being able to conduct normal business, displaced workers, and lost opportunities.

Total estimated building losses are anticipated to be \$453.44M. Business interruption expenses account for 16% of this total. Residential structures are expected to sustain the greatest loss by far, more than 56% of the total loss for the county.

Table 5-17 provides a summary of the anticipated building-related losses. All figures are expressed in millions of dollars.

Table 5-17: Building-Related Economic Loss Estimates

| Area | Single-Family | Other Residential | Commercial | Industrial | Other | Total |
|-----------------------------|---------------|-------------------|---------------|--------------|--------------|---------------|
| Income Losses | | | | | | |
| Wage | 0 | 1.07 | 11.92 | 1.04 | 0.91 | 14.94 |
| Capital Related | 0 | 0.46 | 10.01 | 0.62 | 0.33 | 11.43 |
| Rental | 4.70 | 2.93 | 5.57 | 0.33 | 0.49 | 14.02 |
| Relocation | 16.39 | 2.66 | 9.08 | 1.46 | 4.65 | 34.23 |
| Capital Stock Losses | | | | | | |
| Structural | 27.66 | 6.02 | 16.51 | 5.36 | 8.04 | 63.58 |
| Non-Structural | 109.04 | 30.52 | 41.18 | 17.16 | 15.19 | 213.09 |
| Content | 44.52 | 9.37 | 23.02 | 12.14 | 9.36 | 98.41 |
| Inventory | 0 | 0 | 0.86 | 2.49 | 0.39 | 3.74 |
| TOTAL | 202.30 | 53.01 | 118.15 | 40.60 | 39.37 | 453.44 |

Transportation and Utility Lifeline Losses

Earthquakes often cause extensive damage to a community's infrastructure. Tables 5-18 and 5-19 depict the potential damage Champaign County could expect to its transportation and utility systems. Loss figures address only the cost to repair, not business interruption costs. Numbers are expressed in millions of dollars.

Table 5-18: Transportation System Economic Losses

| System | Component | Inventory Value | Economic Loss |
|--------------|------------|-----------------|----------------|
| Highway | Segments | \$463.79M | 0 |
| | Bridges | \$47.91M | \$1.33M |
| Railways | Segments | \$62.49M | 0 |
| | Bridges | \$0.08M | 0 |
| | Facilities | \$5.33M | \$0.66M |
| Bus | Facilities | \$1.14M | \$0.51M |
| Airport | Facilities | \$21.30M | \$8.87M |
| | Runways | \$75.93M | 0 |
| Total | | \$678M | \$11.4M |

Table 5-19: Utility System Economic Losses

| System | Component | Inventory Value | Economic Loss |
|---------------|--------------------|------------------|------------------|
| Potable Water | Distribution Lines | \$32.70M | \$0.66M |
| | Facilities | \$489.50M | \$114.88M |
| Waste Water | Distribution Lines | \$19.60M | \$0.47M |
| | Facilities | \$0.10M | \$0.03M |
| Natural Gas | Distribution Lines | \$13.10M | \$0.14M |
| Communication | Facilities | \$0.10M | \$0.03M |
| Total | | \$555.03M | \$116.17M |